



IFW

Docket No.: 055071-0351

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of	:	Customer Number: 20277
Robert SOCHA	:	Confirmation Number: 3814
Application No.: 10/813,626	:	Group Art Unit: 1756
Filed: March 31, 2004	:	Examiner: Unknown
For: SOURCE AND MASK OPTIMIZATION	:	

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop IDS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

10/813,626

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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as our correspondence address.**



SHEET 1 OF 1

INFORMATION DISCLOSURE  
CITATION IN AN  
APPLICATION

(PTO-1449)

ATTY. DOCKET NO.  
**055071-0351**SERIAL NO.  
**10/813,626**APPLICANT  
**Robert SOCHA**FILING DATE  
**March 31, 2004**GROUP  
**1756**

## U.S. PATENT DOCUMENTS

EXAMINER'S INITIALS	CITE NO.	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US 5,680,588	10-21-1997	Gortych et al.	
		US 5,300,786	04-05-1994	Brunner et al.	
		US 5,805,290	09-08-1998	Ausschnitt et al.	
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## FOREIGN PATENT DOCUMENTS

EXAMINER'S INITIALS	CITE NO.	Foreign Patent Document Country Codes - Number - Kind Codes (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Figures Appear	Translation	
						Yes	No
		JP 2000-232057A				X	

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER'S INITIALS	CITE NO.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		BURN J. LIN, "The Exposure-Defocus Forest," Jpn. J. Appl. Phys. Vol. 33 (1994) pp 6756-6764
		M. DUSA et al., "Study of mask aerial images to predict CD proximity and line end shortening of resist patterns," Proc. of SPIE Vol. 4349 (2001), pp. 148-159
		B.P. MATHUR et al., "Quantitative Evaluation of Shape of Image on Photoresist of Square Apertures," IEEE Transactions of Electron Devices, Vol. 35, No. 3 (March 1988), pp. 294-297
		CHRISTOPHER J. PROGLER et al., "Merit functions for lithographic lens design," J. Vac. Sci. Technol. B 14(6), (Nov/Dec 1996), pp. 3714-3718
		NISHRIN KACHWALA et al., "Imaging contrast improvement for 160 nm line features using sub resolution assist features with binary, 6% ternary attenuated phase shift mask with process turned resist," SPIE Vol. 3679 (1999), pp. 55-67

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.